

Weston Senior Activity Center
Entry Stair Replacement and New Access Ramp Project

9 School Road, Weston CT 06883

SPECIFICATIONS



BID SET JUNE 9, 2020

SPECIFICATIONS

Technical specifications and administrative requirements for the Project are divided into 16 Divisions as follows. Division 1 General Requirements apply to all work for the Project.

Division 1	General Requirements	Division 9	Finishes
Division 2	Sitework	Division 10	Specialties
Division 3	Concrete	Division 11	Equipment
Division 4	Masonry	Division 12	Furnishings
Division 5	Metals	Division 13	Special Construction
Division 6	Wood and Plastics	Division 14	Conveying Systems
Division 7	Thermal and Moisture Control	Division 15	Mechanical
Division 8	Doors and Windows	Division 16	Electrical

TABLE OF CONTENTS

DIVISION	CONTENTS
CONDITIONS OF CONTRACT	Owner–Contractor Agreement General Conditions
DIVISION 1	GENERAL REQUIREMENTS
Section 01000	Project Requirements
DIVISION 2	SITE CONSTRUCTION
Section 02220	Demolition
Section 02230	Site Clearing
Section 02300	Earthwork
Section 02621	Foundation Drainage Systems
Section 02754	Cement Concrete Paving
Section 02800	Site Improvements and Amenities
DIVISION 3	CONCRETE
Section 03300	Cast-in-Place Concrete
DIVISION 4	MASONRY
Not Used	
DIVISION 5	METALS
Section 05500	Metal Fabrications
DIVISION 6	WOOD AND PLASTIC
Not Used	
DIVISION 7	THERMAL & MOISTURE PROTECTION
Section 07900	Joint Sealers
DIVISION 8	DOORS AND WINDOWS
Section 08720	Power Door Operators
DIVISION 9	FINISHES
Not Used	

DIVISION 10 SPECIALTIES
Not Used

DIVISION 11 EQUIPMENT
Not Used

DIVISION 12 FURNISHINGS
Not Used

DIVISION 13 SPECIAL CONSTRUCTION
Not Used

DIVISION 14 CONVEYING SYSTEMS
Not Used

DIVISION 15 MECHANICAL
Not Used

DIVISION 16 ELECTRICAL
Section 16000 Electrical

CONDITIONS OF CONTRACT

The following Conditions of Contract are included as if bound with this document.

AGREEMENT BETWEEN OWNER AND CONTRACTOR:

The Contractor and Owner will be expected to enter into a Contract for a Stipulated Sum. The form will be **AIA Document A107-2017 Edition**.

PREBID SITE REVIEW AND BID SUBMISSION

Post Date: **July 17, 2020**

Close Date: **August 3, 2020, 12:00 AM**

Bids will be received at Weston Town Hall, 56 Norfield Road, Weston, CT 06883 until **August 3, 2020 until 12:00 A.M.** Prior to the public opening of the bids, any bid submitted may be withdrawn by the bidder if said bidder discovers mathematical or clerical errors in his bid. Any such bid withdrawal may be made without penalty or prejudice. After the bids are opened, all offers will be considered firm for a period of ninety days and no bid may be withdrawn for any reason during that period except for such cause as the Town of Weston in its sole discretion deems sufficient. The bid opening can be viewed online (Only) at meet.google.com/ema-axdj-cuu

Plans and specifications (Bid Documents) may be obtained at the Town of Weston website at www.WESTONCT.GOV/RFPS. Bidders may obtain complete sets of plans and specifications containing all bid packages.

It is strongly recommended for Bidders to examine the site prior to submitting a bid to determine site conditions. The site is available for viewing at Weston Senior Activities Center, 9 School Road, Weston, CT. Due to restrictions of Covid-19, you must put on a face mask before entering the property. No exceptions. Please bring protective gear with you as the Town cannot supply it. Email Rob Sanders Architects at info@rsarchct.com with any questions regarding site conditions or discrepancies in the documents.

DIVISION 1

GENERAL REQUIREMENTS

01000 PROJECT REQUIREMENTS:

Summary

The Project consists of replacement of existing entry landing and stair with new access ramp and stair, railing and walks.

Project Requirements

Requirements for Sequence of Work, Phasing, and Occupancy: Maintain alternate egress as required for continuous occupancy of the Center.

Permits

Apply for, obtain, and pay for building permits other permits, and utility company back-charges required to perform the work. Submit copies to Owner.

Intent

Drawings and specifications are intended to provide the basis for the proper completion of the Project suitable for the intended use of the Owner.

Items not expressly set forth but which are reasonably implied or necessary for the proper performance of this work shall be included.

Coordination

1. Coordinate the work of all trades.
2. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
3. Verify location of utilities and existing conditions. Notify Architect of conditions differing from those indicated on the Drawings.
4. Verify dimensions on Drawings with dimensions at the Project. Do not scale Drawings.

Cutting and Patching

1. Provide cutting and patching work to properly complete the Project.
2. Do not remove or alter structural components without written approval.
3. Cut with tools appropriate for materials to be cut.
4. Patch with materials and methods to produce patch which is not visible from a distance of five feet.
5. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease fire performance, decrease acoustical performance, energy performance, operational life, or safety factors.

Field Engineering

Verify and locate utilities, existing facilities, and equipment.

Project Meetings

Arrange for a preconstruction conference prior to start of construction. Meeting shall be attended by Owner, Architect, Contractor, and major subcontractors.

Arrange for progress meetings once a week during construction, and prior to application for payment.

Submittals

Submit a project schedule and update periodically. Submit for approval all submittals listed in individual sections with the following PDF copies: Shop drawings, reviewed and annotated by the Contractor, product data, samples, test reports, warranties, other submittals.

Include details of construction and adjacent construction in shop drawings. Clearly indicate any deviations from requirements of the contract documents. Fabricate materials from approved shop drawings only.

Quality Assurance

1. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, including accessibility guidelines where applicable. Submit copies of inspection reports, notices and similar documents to Architect.
2. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years.
3. Use experienced installers. Furnish evidence of experience if requested.
4. Deliver, handle, and store materials in strict accordance with manufacturer's instructions.
5. Use of any supplier or subcontractor is subject to Owner's approval.
6. Engage and pay for testing agencies as required. Refer to individual sections for additional requirements.

Temporary Facilities

1. Provide temporary facilities and connections as required for the proper completion of the project.
2. Provide and maintain temporary utility services.
3. Owner will pay for utility service consumed. Do not waste.

4. Provide temporary protection for adjacent areas to prevent contamination by construction dust and debris.
5. Provide temporary barricades as necessary to ensure protection of the public.
6. Provide suitable waste disposal units and empty regularly. Do not permit accumulation of trash and waste materials.
7. Provide temporary sanitary facilities.
8. Maintain egress within and around construction areas.
9. Maintain fire alarm systems in operation during construction.
10. Provide temporary protection for adjacent construction. Promptly repair any damage at no additional cost to the Owner.

Products and Substitutions

1. Provide products and materials specified. Request Architect's selection of colors and accessories in sufficient time to avoid delaying progress of the work.
2. Submit requests for substitutions shall be in writing, including reasons. Submit sufficient information for Architect to evaluate proposed substitution.
3. Remove and replace work which does not conform to the contract documents at no additional expense to the Owner.

Installation

1. Inspect substrates and report unsatisfactory conditions in writing.
2. Do not proceed until unsatisfactory conditions have been corrected.
3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
5. Install materials in proper relation with adjacent construction and with proper appearance.
6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the Owner.
7. Refer to additional installation requirements and tolerances specified under individual specification sections.

Closeout

1. Prepare punchlist for remaining work for review by the Architect.
2. Complete punchlist items promptly at no additional expense to the Owner.
3. Submit accurate record documents of building and site.
4. Submit operating manuals, maintenance manuals, and warranty information. Obtain and submit copy of occupancy permits.
5. Train Owner's personnel in use of building systems.
6. Remove temporary facilities and provide final cleaning and touch-up.
7. Restore portions of building, site improvements, landscaping and other items damaged by construction operations to the satisfaction of the Architect at no additional expense to the Owner.

DIVISION 2

SITE WORK

02220 DEMOLITION:

Summary

1. Provide complete demolition of designated building structures.
2. Provide selective demolition of exterior structures and components designated to be removed.
3. Protect portions of building, site and adjacent structures affected by demolition operations.
4. Provide site demolition including designated paving, curbing, and utility structures.
5. Provide demolition of below-grade foundations and site improvements to depth to avoid conflict with new construction and site work.
6. Remove hollow items or items which could collapse.
7. Remove abandoned utilities and wiring systems.
8. Notify Owner of schedule of shut-off of utilities which serve occupied spaces.
9. Provide temporary protection for the public from demolition operations.
10. Provide pollution control during demolition operations.
11. Provide removal and legal disposal of materials.

Demolition

1. Survey existing conditions and correlate with Drawings and specifications to verify extent of demolition required.
2. Verify conditions at site to determine whether demolition methods proposed for use will not endanger existing structures.
3. Perform demolition operations by methods which do not endanger adjacent spaces, structures, or the public.
4. Perform demolition operations to prevent dust and pollutant hazards.

SECTION 02230 SITE CLEARING

Summary

1. Protect existing trees, vegetation, landscaping materials, and site improvements not scheduled for clearing which might be damaged by construction activities.
2. Clear and grub site of stumps, vegetation, debris, rubbish, and designated site improvements.
3. Provide topsoil stripping and stockpiling at approved locations.
4. Provide temporary erosion control, siltation control, and dust control.
5. Provide temporary protection of adjacent property, structures, benchmarks, and monuments.
6. Provide removal and legal disposal of cleared materials not to be stockpiled.

Products

Plant protection, erosion control, siltation control, and dust control materials suitable for site conditions.

Installation

Comply with requirements of Section 01000 – Project Requirements.

02300 EARTHWORK

Summary

1. Provide excavation, filling, compaction, and grading for site improvements, and utilities.

2. Provide suitable materials for sub-base, drainage fill, and backfill for slabs, pavements, and improvements.
3. Provide rock excavation without blasting unless authorized.
4. Provide additional materials from offsite if required.
5. Provide removal and legal disposal of excavated materials.
6. Provide erosion control and control of runoff during earthwork operations.

Products

1. Subbase Material: Graded mixture of natural or crushed gravel, crushed stone or slag, and natural or crushed sand.
2. Drainage Fill: Washed, evenly graded mixture of crushed stone or gravel, with 100 percent passing a 1-1/2 inch sieve and not more than 5 percent passing a No. 200 sieve.
3. Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other unsuitable materials.

Installation

1. Comply with requirements of Section 01000 - Project Requirements.
2. Provide compaction under structures, building slabs, steps, pavements, and walkways; 95 percent maximum density, ASTM D 698, standard Proctor.
3. Provide compaction under lawns or unpaved areas; 90 percent maximum density, ASTM D 698, standard Proctor.
4. Provide grading tolerance for lawns, unpaved areas, and walks of plus or minus 1 inch.
5. Provide grading tolerance for pavements of plus or minus 1/2 inch.
6. Provide grading tolerance for fill under building slabs of plus or minus 1/2 inch measured with 10 foot straightedge.

SECTION 02621 DRAINAGE SYSTEMS

Summary

Provide CULTEC Contactor® 100HD chambers and associated piping for underground stormwater management.

Products

1. Pipe and Fittings:
 - a. Polyvinyl chloride (PVC) Sewer Pipe and Fittings: ASTM D 3034, F679 bell-and-spigot ends, for loose joints.
 - b. Perforated Polyvinyl chloride (PVC) Sewer Pipe and Fittings: ASTM D 3034, bell-and-spigot ends, for loose joints.
2. Accessories: Pipe couplings, cleanouts, sleeves, and drainage conduits.
3. Cultec chambers shall be manufactured in the U.S.A. by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
4. The chamber shall be vacuum thermoformed of polyethylene with a black interior and blue exterior.
5. The nominal chamber dimensions of the CULTEC Contactor® 100HD shall be 12.5 inches (318 mm) tall, 36 inches (914 mm) wide and 8 feet (2.44 m) long. The installed length of a joined Contactor® 100HD shall be 7.5 feet (2.29 m).
6. The chamber shall have two side portals to accept CULTEC HVLV® SFCx2 Feed Connectors to create an internal manifold. The nominal I.D. dimensions of each side portal shall be 5.75 inches (146 mm) high by 7.5 inches (191 mm) wide. Maximum allowable O.D. in the side portal is 6 inches (150 mm) HDPE, PVC.

Installation

1. The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings or separate end walls. Maximum inlet opening on the chamber end wall is 10 inches (250 mm) HDPE, PVC.
2. The Contactor® 100RHD Starter/Stand Alone unit must be formed as a whole chamber having two fully formed integral end walls and having no separate end plates or separate end walls.
3. The Contactor® 100EHD Middle/End unit must be formed as a whole chamber having one fully formed integral end wall and one fully open end wall and having no separate end plates or end walls.
4. Chambers must have horizontal stiffening flex reduction steps between the ribs.
5. Minimum allowable cover over the top of the chamber shall be 12”.
6. Comply with requirements of Section 0100 – Project Requirements.

SECTION 02754 CEMENT CONCRETE PAVING**Summary**

Provide cast-in-place concrete paving over prepared sub-base.

Submittals

Submit product data, mix design.

Products

1. Concrete: ASTM C 150, Type 1, Portland cement; ASTM C 33, normal weight aggregates; potable water.
 - a. Design Mix: ASTM C 94, 3000 psi, 28 day minimum compressive strength.
 - b. Slump Limits: 8 inches minimum with superplasticizer, 3 inches otherwise.
 - c. Air Content: 5 to 8 percent.
 - d. Finish: Broom.
 - e. Finish: Exposed aggregate.
2. Wire Mesh: Welded plain steel wire fabric, ASTM A 185.
3. Reinforcing Bars: Deformed steel bars, ASTM A 615, Grade 60.
4. Fabricated Bar Mats: Steel bar or rod mats, ASTM A 184, using ASTM A 615, Grade 60 steel bars.
5. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 60.
6. Hook Bolts: ASTM A 307, Grade A threaded bolts.
7. Liquid membrane Forming and Sealing Curing Compound: ASTM C 309, Type I, Class A.
8. Bonding Compound: Polyvinyl acetate or acrylic base.
9. Epoxy Adhesive: ASTM C 881.

Installation

Comply with requirements of Section 01000 – Project Requirements.

Construction Tolerance: 1/8” in 10’ for grade and alignment of top of forms; 1/4” in 10’ for vertical face on longitudinal axis.

DIVISION 3

CONCRETE

03300 CAST-IN-PLACE CONCRETE:

Summary

1. Provide plant-mixed cast-in-place concrete.
 - a. Footings and foundations.
 - b. Slabs and stairs.
 - c. Paving base and pads.
2. Remodel existing concrete work as required for new construction.
3. Comply with ACI 301, Specifications for structural Concrete for Buildings, ACI 318, Building Code Requirements for Reinforced Concrete, and CRSI Manual of Standard Practice.
4. Provide independent testing laboratory to sample concrete properties.

Submittals

Submit product data, shop drawings, mix design, test reports.

Products

1. Concrete Design Mixes, ASTM C 94, 28-day Compressive Strength:
 - a. Exterior Site Concrete and Pads Exposed to Weather: 3000 psi.
 - b. Exterior Site Concrete and Pads Exposed to Weather: 2500 psi.
 - c. Formwork: Plywood or metal panel formwork sufficient for structural and visual requirements.
2. Reinforcing Materials:
 - a. Reinforcing Bars: ASTM A 767, Class II, galvanized.
 - b. Reinforcing Bars: ASTM A 775, epoxy-coated.
 - c. Steel Wire: ASTM A 82.
 - d. Steel Wire Fabric: ASTM A 185, welded.
 - e. Steel Wire Fabric: ASTM A 497, welded, deformed.
 - f. Fiber Reinforcement: Engineered polypropylene fibers for secondary reinforcement of slabs.
3. Concrete Materials: ASTM C 150, Type I, Portland cement; potable water.
 - a. Normal weight aggregates, ASTM C 33.
 - b. Fiber Reinforcement: Polypropylene fibers for secondary reinforcement, ASTM C 1116, Type III.
4. Concrete Admixtures: Containing less than 0.1 percent chloride ions.
 - a. Air-Entraining Admixture: ASTM C 260, for exterior exposed concrete and foundations exposed to freeze-thaw.
5. Auxiliary Materials:
 - a. Waterstops: Rubber PVC waterstops.
 - b. Nonslip Aggregate Finish: fused aluminum oxide granules or crushed emery.
 - c. Evaporation Control Compound: Monomolecular film-forming compound.
 - d. Epoxy Adhesive: ASTM C 881, two-component material.

Installation

1. Comply with requirements of Section 01000 - Project Requirements.

2. Comply with ASTM C 94, CRSI Manual of Standard Practice, and ACI publications.
3. Provide Concrete Finishes for Formed Surfaces:
 - a. Surfaces Not Exposed to View: As-cast form finish.
 - b. Surfaces Exposed to View: Smooth form.
 - c. Surfaces Exposed to View: Smooth rubbed.
4. Provide Concrete Finishes for Monolithic Slabs:
 - a. Nonslip broom finish for exterior concrete platforms, steps, and ramps.
 - b. Nonslip aggregate finish for concrete stair treads, platforms, ramps, and sloped walks.
5. Provide expansion and control joints at adjacent existing structures and slabs.

DIVISION 4

NOT USED

DIVISION 5

METALS

05500 METAL FABRICATION:

Summary

Provide metal fabrications: Handrails and railings

Tolerances: Fabrication tolerance 1/8" in 10'; erection tolerance, 1/16".

Submittals

Submit product data, shop drawings.

Products

1. Steel Tubing: ASTM A 500 or A 501.
2. Steel Pipe, Black Finish: ASTM A 53.
3. Fasteners: non-corrosive, suitable for service intended.
4. Zinc-Coating: Hot-dip galvanized coating for materials in exterior assemblies or exterior walls.

Installation

1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with ASTM E 985 for handrail and railing structural performance.
3. Comply with AISC codes and specifications and with AWS Structural Welding Code.

DIVISION 6

NOT USED

DIVISION 7

THERMAL AND MOISTURE CONTROL

SECTION 07900 JOINT SEALERS:

Summary

Provide joint sealers at exterior vertical and horizontal joints.

Products

Paving Joint Fillers:

1. Expanding Type: Self-expanding cork.
2. Cork Type: Cork.
3. Rubber Type: Sponge rubber.
4. Bituminous Type: Bituminous fiber.
5. Application: Filler for exterior paving joints.

Installation

1. Comply with requirements of Section 01000 – Project Requirements.
2. Test sealant adhesion for each substrate required.
3. Install in proper relation with adjacent work.
4. Clean adjacent surfaces soiled with sealant immediately.

DIVISION 8**DOORS AND WINDOWS****08720 POWER DOOR OPERATORS****Summary**

Provide power for power-assisted doors.

Submittals

Submit product data, hardware schedule, maintenance data.

Products

1. Products: Magic-Access Swing Door Operator by Stanley Access Technology (www.STANLEYACCESS.com).
2. Power Units: One-way swing, double door opening.
3. Operator: Electromechanical operator.
4. Option: Power assistance.
5. Radio Door control: Wall supported switch.
6. Auxiliary Materials: Wall push-plate switch.

Installation

1. Internal surface-mount.
2. Comply with requirements of Section 0100 – Project Requirements

DIVISION 9

NOT USED

DIVISION 10

NOT USED

DIVISION 11

NOT USED

DIVISION 12

NOT USED

DIVISION 13

NOT USED

DIVISION 14

NOT USED

DIVISION 15

NOT USED

DIVISION 16

ELECTRICAL

SECTION 16000 ELECTRICAL

Summary

1. Provide electrical systems for the following:
 - a. Power door operators
 - b. Exterior lighting
 - c. Exterior emergency lighting
2. Maintain fire alarm system in operation during construction.
3. Coordinate with Owner's room uses to provide adequate system for all contract areas.
4. Coordinate location of roof drainage systems to avoid interference with location of designated lighting fixture locations.

Products

Provide new materials suitable for service intended complying with approved submittals. Provide accessories such as controls, cover plates, and connections to equipment. Finish as selected by Owner.

Provide emergency or alternate power source for exit and emergency lighting systems.

Installation

1. Comply with requirements of Section 01000 – Project Requirements.
2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction and National Electrical Code.
3. Provide core drilling as required for new work.
4. Conceal conduit to the greatest extent practical.
5. Center ceiling-mounted elements in center of ceiling areas as applicable.
6. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
7. Test all systems for proper operation.
8. Label circuits in electrical panels.
9. Instruct Owner's personnel in proper operation of systems.

Fixture Schedule

Wall Pack: RAB #SLIM26N

Canopy: RAB \$VANLED20N